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Reviewer: Anne Corrigan

Timestamp: Mon Aug 13 16:26:09 EDT 2007

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Application No: 10716293

Version No: 2.1

**Input Set:****Output Set:****Started:** 2007-08-13 16:25:30.258**Finished:** 2007-08-13 16:25:33.289**Elapsed:** 0 hr(s) 0 min(s) 3 sec(s) 31 ms**Total Warnings:** 218**Total Errors:** 0**No. of SeqIDs Defined:** 218**Actual SeqID Count:** 218

Error code	Error Description
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W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
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W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
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W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)

**Input Set:**

**Output Set:**

**Started:** 2007-08-13 16:25:30.258  
**Finished:** 2007-08-13 16:25:33.289  
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**Actual SeqID Count:** 218

Error code

Error Description

This error has occurred more than 20 times, will not be displayed

## SEQUENCE LISTING

<110> MASSIA, STEPHEN P.  
EHTESHAMI, GHOLAM R.

&lt;120&gt; THERAPEUTIC BIOCONJUGATES

<130> AZTE:015US

<140> 10716293

<141> 2003-11-17

<150> 10/295,734

<151> 2002-11-15

<160> 218

<170> PatentIn version 3.2

 $\langle 210 \rangle$  1

&lt;211&gt; 54

<212> DNA

<213> Artificial Sequence

$\langle 220 \rangle$

<223> Description of Artificial Sequence: Integrin

 $\langle 220 \rangle$ 

&lt;221&gt; CDS

<222> (1) .. (54)

<400> 1

act tac aaa aca aag gag gaa atg ata gta gca acg agt cag acc agt 48  
Thr Tyr Lys Thr Lys Glu Glu Met Ile Val Ala Thr Ser Gln Thr Ser  
1 5 10 15

caa tat 54  
Gln Tyr

 $\langle 210 \rangle \quad 2$ 

<211> 18

&lt;212&gt; PRT

<213> Artificial Sequence

 $\langle 220 \rangle$ 

<223> Description of Artificial Sequence: Integrin

 $\langle 400 \rangle$  2

Thr Tyr Lys Thr Lys Glu Glu Met Ile Val Ala Thr Ser Gln Thr Ser  
1 5 10 15

Gln Tyr

<210> 3  
<211> 15  
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<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: Integrin

<220>  
<221> CDS  
<222> (1)..(15)

<400> 3  
cag acc agt caa tat 15  
Gln Thr Ser Gln Tyr  
1 5

<210> 4  
<211> 5  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: Integrin

<400> 4  
  
Gln Thr Ser Gln Tyr  
1 5

<210> 5  
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<220>  
<223> Description of Artificial Sequence: Integrin

<220>  
<221> CDS  
<222> (1)..(15)  
  
<400> 5  
ata gca gta ata gga 15  
Ile Ala Val Ile Gly  
1 5

<210> 6

<211> 5  
 <212> PRT  
 <213> Artificial Sequence  
 <220>  
 <223> Description of Artificial Sequence: Integrin

<400> 6

Ile Ala Val Ile Gly  
 1 5

<210> 7  
 <211> 261  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Integrin

<220>  
 <221> CDS  
 <222> (1)..(261)

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 aat ttc cta gag aag ttt gtt cag ggt ctc gat atc ggc cct acc aaa 48  
 Asn Phe Leu Glu Lys Phe Val Gln Gly Leu Asp Ile Gly Pro Thr Lys  
 1 5 10 15  
 acc cag gtc ggt ctg ata caa tat gcg aat aat cca cgc tgg ttc aat 96  
 Thr Gln Val Gly Leu Ile Gln Tyr Ala Asn Asn Pro Arg Trp Phe Asn  
 20 25 30  
 cta aat act tat aag act aag gaa gag atg att gtt gct acc tcc cag 144  
 Leu Asn Thr Tyr Lys Thr Lys Glu Glu Met Ile Val Ala Thr Ser Gln  
 35 40 45  
 act agc cag tac ggc ggt gat cta aca aat aca ttc gga gcg atc cag 192  
 Thr Ser Gln Tyr Gly Gly Asp Leu Thr Asn Thr Phe Gly Ala Ile Gln  
 50 55 60  
 tat gcg cga aaa tat gcg tat tca gcg gcc tct gga ggc cgt cga agt 240  
 Tyr Ala Arg Lys Tyr Ala Tyr Ser Ala Ala Ser Gly Gly Arg Arg Ser  
 65 70 75 80  
 gca aca ctt aaa gta atg gtg 261  
 Ala Thr Leu Lys Val Met Val  
 85

<210> 8  
 <211> 87  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<400> 8

Asn Phe Leu Glu Lys Phe Val Gln Gly Leu Asp Ile Gly Pro Thr Lys  
1 5 10 15

Thr Gln Val Gly Leu Ile Gln Tyr Ala Asn Asn Pro Arg Trp Phe Asn  
20 25 30

Leu Asn Thr Tyr Lys Thr Lys Glu Glu Met Ile Val Ala Thr Ser Gln  
35 40 45

Thr Ser Gln Tyr Gly Gly Asp Leu Thr Asn Thr Phe Gly Ala Ile Gln  
50 55 60

Tyr Ala Arg Lys Tyr Ala Tyr Ser Ala Ala Ser Gly Gly Arg Arg Ser  
65 70 75 80

Ala Thr Leu Lys Val Met Val  
85

<210> 9

<211> 294

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<220>

<221> CDS

<222> (1)..(294)

<400> 9

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Tyr Asn Val Asp Thr Glu Ser Ala Leu Leu Tyr Gln Gly Pro His Asn  
1 5 10 15

aca ctg ttt ggc tac agt tgg ctc cac tcc cat gga gct cat aga tgg 96  
Thr Leu Phe Gly Tyr Ser Trp Leu His Ser His Gly Ala His Arg Trp  
20 25 30

cta ctg gta gga gcg cca aca gca atg tgg tta gca atg gca agc gtt 144  
Leu Leu Val Gly Ala Pro Thr Ala Met Trp Leu Ala Met Ala Ser Val  
35 40 45

att aat cct ggg gcc atc tat aga tgc aga ata gga aaa aac cca ggg 192  
Ile Asn Pro Gly Ala Ile Tyr Arg Cys Arg Ile Gly Lys Asn Pro Gly

50	55	60	
cag acg tgt gaa ttg	caa ttg ggt tca ttc	cac ggt gag ccc ggc ggt	240
Gln Thr Cys Glu Leu	Gln Leu Gly Ser Phe	His Gly Glu Pro Gly Gly	
65	70	75 80	
aag act tgt cta gag	gaa aga gat cac	caa tgg ctt ggg gtg acc ctc	288
Lys Thr Cys Leu Glu	Glu Arg Asp His	Gln Trp Leu Gly Val Thr Leu	
	85	90 95	
tcg aga			294
Ser Arg			

<210> 10  
 <211> 98  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Integrin

<400> 10

Tyr Asn Val Asp Thr	Glu Ser Ala Leu	Leu Tyr Gln Gly	Pro His Asn
1	5	10	15

Thr Leu Phe Gly Tyr	Ser Trp Leu His	Ser His Gly Ala	His Arg Trp
20	25	30	

Leu Leu Val Gly Ala	Pro Thr Ala Met	Trp Leu Ala Met	Ala Ser Val
35	40	45	

Ile Asn Pro Gly Ala	Ile Tyr Arg Cys	Arg Ile Gly Lys	Asn Pro Gly
50	55	60	

Gln Thr Cys Glu Leu	Gln Leu Gly Ser	Phe His Gly Glu	Pro Gly Gly
65	70	75	80

Lys Thr Cys Leu Glu	Glu Arg Asp His	Gln Trp Leu Gly	Val Thr Leu
85	90	95	

Ser Arg

<210> 11  
 <211> 156  
 <212> DNA  
 <213> Artificial Sequence



<220>

<223> Description of Artificial Sequence: Integrin

<220>

<221> CDS

<222> (1)..(156)

<400> 11

cag gat tat gta aag aaa ttc ggc gaa cat ttt gca agt tgt caa gca	48
Gln Asp Tyr Val Lys Lys Phe Gly Glu His Phe Ala Ser Cys Gln Ala	
1 5 10 15	

ggg ata tcc tcg ttc tat acg aaa gac tta atc gta atg ggt gca cca	96
Gly Ile Ser Ser Phe Tyr Thr Lys Asp Leu Ile Val Met Gly Ala Pro	
20 25 30	

gga tct tca tac tgg aca gga agc tta ttt gta tac atg att acc act	144
Gly Ser Ser Tyr Trp Thr Gly Ser Leu Phe Val Tyr Met Ile Thr Thr	
35 40 45	

aat aag tat aaa	156
Asn Lys Tyr Lys	
50	

<210> 12

<211> 52

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<400> 12

Gln Asp Tyr Val Lys Lys Phe Gly Glu His Phe Ala Ser Cys Gln Ala	
1 5 10 15	

Gly Ile Ser Ser Phe Tyr Thr Lys Asp Leu Ile Val Met Gly Ala Pro	
20 25 30	

Gly Ser Ser Tyr Trp Thr Gly Ser Leu Phe Val Tyr Met Ile Thr Thr	
35 40 45	

Asn Lys Tyr Lys	
50	

<210> 13

<211> 156

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<220>

<221> CDS

<222> (1)..(156)

<400> 13

cag gat tat gta aag aaa ttc ggc gaa cat ttt gca agt tgt caa gca	48
Gln Asp Tyr Val Lys Lys Phe Gly Glu His Phe Ala Ser Cys Gln Ala	
1 5 10 15	

ggg ata tcc tcg ttc tat acg aaa gac tta atc gta atg ggt gca cca	96
Gly Ile Ser Ser Phe Tyr Thr Lys Asp Leu Ile Val Met Gly Ala Pro	
20 25 30	

gga tct tca tac tgg aca gga agc tta ttt gta tac atg att acc act	144
Gly Ser Ser Tyr Trp Thr Gly Ser Leu Phe Val Tyr Met Ile Thr Thr	
35 40 45	

aat aag tat aaa	156
Asn Lys Tyr Lys	
50	

<210> 14

<211> 52

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<400> 14

Gln Asp Tyr Val Lys Lys Phe Gly Glu His Phe Ala Ser Cys Gln Ala	
1 5 10 15	

Gly Ile Ser Ser Phe Tyr Thr Lys Asp Leu Ile Val Met Gly Ala Pro	
20 25 30	

Gly Ser Ser Tyr Trp Thr Gly Ser Leu Phe Val Tyr Met Ile Thr Thr	
35 40 45	

Asn Lys Tyr Lys	
50	

<210> 15

<211> 60

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<220>

<221> CDS

<222> (1)..(60)

<400> 15

gga cat aga tgg aaa aac ata ttt tat ata aag aat gaa aat aaa tta 48  
Gly His Arg Trp Lys Asn Ile Phe Tyr Ile Lys Asn Glu Asn Lys Leu  
1 5 10 15

cca aca gga gga 60  
Pro Thr Gly Gly  
20

<210> 16

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<400> 16

Gly His Arg Trp Lys Asn Ile Phe Tyr Ile Lys Asn Glu Asn Lys Leu  
1 5 10 15

Pro Thr Gly Gly  
20

<210> 17

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<220>

<221> CDS

<222> (1)..(33)

<400> 17

gga gga gca cca cag cat gaa caa ata gga aaa 33  
Gly Gly Ala Pro Gln His Glu Gln Ile Gly Lys  
1 5 10

<210> 18

<211> 11  
<212> PRT  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: Integrin  
  
<400> 18

Gly Gly Ala Pro Gln His Glu Gln Ile Gly Lys  
1 5 10

<210> 19  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Integrin

<220>  
<221> CDS  
<222> (1)..(18)

<400> 19  
agt tat tgg aca gga agt 18  
Ser Tyr Trp Thr Gly Ser  
1 5

<210> 20  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Integrin

<400> 20

Ser Tyr Trp Thr Gly Ser  
1 5

<210> 21  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Integrin

<220>  
<221> CDS

<222> (1)..(33)

<400> 21

atg gga gca cca gga agt agt tat tgg aca gga 33  
Met Gly Ala Pro Gly Ser Ser Tyr Trp Thr Gly  
1 5 10

<210> 22

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<400> 22

Met Gly Ala Pro Gly Ser Ser Tyr Trp Thr Gly  
1 5 10

<210> 23

<211> 111

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<220>

<221> CDS

<222> (1)..(111)

<400> 23

tac aat gta gat aca gaa agt gca tta ctc tat caa ggt cca cac aac 48  
Tyr Asn Val Asp Thr Glu Ser Ala Leu Leu Tyr Gln Gly Pro His Asn  
1 5 10 15

aca ttg ttt ggg tat agt tgg ctt cat agt cat gga gca cac aga tgg 96  
Thr Leu Phe Gly Tyr Ser Trp Leu His Ser His Gly Ala His Arg Trp  
20 25 30

ctg cta gta ggc gca 111  
Leu Leu Val Gly Ala  
35

<210> 24

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<400> 24

Tyr Asn Val Asp Thr Glu Ser Ala Leu Leu Tyr Gln Gly Pro His Asn  
1 5 10 15

Thr Leu Phe Gly Tyr Ser Trp Leu His Ser His Gly Ala His Arg Trp  
20 25 30

Leu Leu Val Gly Ala  
35

<210> 25

<211> 225

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<220>

<221> CDS

<222> (1)..(225)

<400> 25

ata gta acg tgt ggc cat aga tgg aaa aat att ttt tat atc aaa cac 48  
Ile Val Thr Cys Gly His Arg Trp Lys Asn Ile Phe Tyr Ile Lys His  
1 5 10 15

gaa aac aaa tta cca aca gga ggg tgt tat ggc gtg ccc ccg gat tta 96  
Glu Asn Lys Leu Pro Thr Gly Gly Cys Tyr Gly Val Pro Pro Asp Leu  
20 25 30

aga acc gaa tta agt aag aga ata gcc cct ggt tat cag gac tac gtt 144  
Arg Thr Glu Leu Ser Lys Arg Ile Ala Pro Gly Tyr Gln Asp Tyr Val  
35 40 45

aaa aag ttc gga gag cat ttt gct agt tgc caa gca ggt atc agt agt 192  
Lys Lys Phe Gly Glu His Phe Ala Ser Cys Gln Ala Gly Ile Ser Ser  
50 55 60

ttc tac act aag gat tta att gtc atg ggg gcg 225  
Phe Tyr Thr Lys Asp Leu Ile Val Met Gly Ala  
65 70 75

<210> 26

<211> 75

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<400> 26

Ile Val Thr Cys Gly His Arg Trp Lys Asn Ile Phe Tyr Ile Lys His  
1 5 10 15

Glu Asn Lys Leu Pro Thr Gly Gly Cys Tyr Gly Val Pro Pro Asp Leu  
20 25 30

Arg Thr Glu Leu Ser Lys Arg Ile Ala Pro Gly Tyr Gln Asp Tyr Val  
35 40 45

Lys Lys Phe Gly Glu His Phe Ala Ser Cys Gln Ala Gly Ile Ser Ser  
50 55 60

Phe Tyr Thr Lys Asp Leu Ile Val Met Gly Ala  
65 70 75

<210> 27

<211> 222

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Integrin

<220>

<221> CDS

<222> (1)..(222)

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Tyr Met Ile Thr Thr Asn Lys Tyr Lys Ala Phe Leu Gly Lys Gln Asn  
1 5 10 15

cag gtg aag cca gga agt tat tta ggg tat agt gta ggt gcc ggc cat 96  
Gln Val Lys Pro Gly Ser Tyr Leu Gly Tyr Ser Val Gly Ala Gly His  
20 25 30

ttc aga ag